Program Components

Plan of Study
A list of course work and other requirements for the degree is prepared with your advisor and then submitted to the co-directors of the program for approval.
The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. Your plan of study should be submitted for approval by the end of the first semester of the program.

Prelim Exam
Students are required to demonstrate their basic knowledge and preparation towards more advanced doctoral level work by completing the requirements of their selected track (Computer Science or Information Systems) as described below:

Computer Science: Each student must select and pass an exam in three subject areas out of a total of four possible areas of

- Algorithms
- Architecture
- Computational Theory
- Operating Systems

The preliminary exam will be given once a year about the second week of February.

Students may choose to take one, two, or all three subject area exams of their selection at the exam time as long as all three subjects are completed by the second year.

If a student fails a subject, he/she may retake the exam at most one more time. Students must sign up for the upcoming prelims and their subject areas by the first week of December prior to the exam.

Information Systems: There are two components to the IS requirements:

- Paper: Students prepare a research paper during the first two years of the program. The paper should demonstrate knowledge of the literature, the ability to define significant research problems, and good technical writing skills. The paper is evaluated by the student’s advisor. Here is a link to the evaluation guidelines for the prelim paper.
- Exam: A written exam covers material in four doctoral courses: ISMG7200, ISMG7210, ISMG7211, and ISMG7220. An exam part is waived if a student demonstrates strong work in the corresponding course by receiving an A or A- in the course. Exams will be given at the end of the first week of fall semester. Students must take each exam part at the earliest time after completing the associated course. Students can retake an exam part at most one time with consent of advisor and program director. Exam retakes will be at the end of the first week of spring semester.

Comprehensive Exam
Students will submit a paper to fulfill the graduate school’s comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition, and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and
presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

**Dissertation Proposal**

A student’s doctoral committee can require a dissertation proposal after the student completes the comprehensive exam. The doctoral committee may consider the quality and level of detail in the comprehensive paper and other factors in determining the need for a student to prepare a dissertation proposal. If the doctoral committee requires a dissertation proposal, the student must prepare a proposal that will be evaluated by the doctoral committee.

Your proposal must include:

- a title, that accurately corresponds to the contents
- a statement giving the purpose and novelty of the study that indicates the expected results
- the methods and techniques to be used
- a bibliography

Proposals are double-spaced, and they should be prepared with care and attention to style required for scholarly writing. The proposal should be detailed enough for the dissertation committee to evaluate the potential for successful completion. The dissertation proposal serves as a guideline that you and dissertation committee will use to ensure successful completion of the dissertation.

The proposal is submitted for review and approval by the doctoral committee.

You will give an oral presentation of the dissertation proposal to the doctoral committee before it is approved.

Your approved proposal is then submitted to the co-directors of the program for final approval.

**University Level Instructional Training**

During the program, you will obtain training in university level instruction. This requirement can be fulfilled by

- working with a faculty member as a teaching assistant
- attending university level teacher training
- teaching a university level class

If you plan a university career you are encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, you will be compensated according to standard university salaries.

**Dissertation Completion**

Following completion of the approval of the dissertation proposal, you prepare and submit a dissertation.

The dissertation is defended before the doctoral committee in a public meeting.

Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.